User manual

Epsilog VX®

Interface box and software for setting parameters

The technical specifications given in this issue are only indicative and can be modified at any time

TABLE OF CONTENTS

ind	date	Modif	auteur
E 1109	3/11/09	1st issue in English	pmau
0210	8/02/10	Ref N° added	pmau
B	08/12/2010	Modif for Epsi AX	

DESCRIPTION AND FUNCTIONS

I. DESCRIPTION :

Epsilog VX is made for the digital adjustment of EPSI-AX sensors (450499). The offset and gain values can be adjusted to adapt precisely the ouput range to the use.

It allows an easy setting with a PC.

It consists in an interface box allowing the wiring and voltage supplying of 4 sensors, and specific software to be installed on a PC.

II. REQUIREMENTS :

1. FOR USE :

- 1 to 4 sensors
- 1 PC equipped with an USB port and EPSILOG VX software.
- 1 Epsilog VX interface.
- 1 USB cable (included).
- If necessary, an adapter with a connector suited to the application.

2. FOR SOFTWARE INSTALLATION :

- 1 PC equipped with an USB port (windows 9x, NT, XP or Vista).
- 1 EPSILOG VX software to be installed on the PC (CDROM).

While starting, the software installed version is displayed.

WIRING AND OUTPUTS
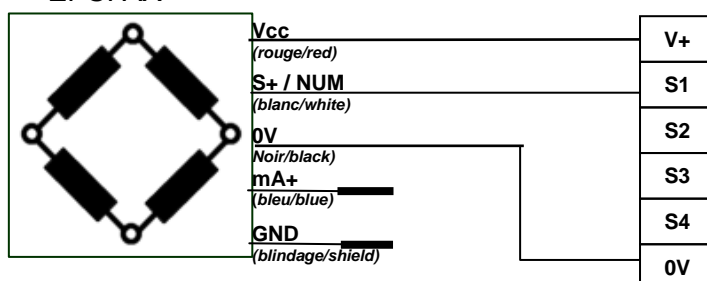
I. WIRING :

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- Disconnectable terminal. It accepts up to 4 sensors..
- V+ output : 12V sensor power supply
- Output 0V : common ground.
- 4 sensor input / output (S1, S2, S3, S4) : 0-5V voltage input / Serial line.
- 1 switch to select input S1 to S4.
- Connected to the PC through an USB port.
- If necessary, a special adapter can be supplied for connecting to sensors beam

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- Blue wire (mA+) not used (to be INSULATED)
- Wiring should be made without any voltage (disconnect the green connector)
- EPSI-AX must be disconnected to any other voltage source when using *Epsilog VX* for setting parameters.(offset and/or gain)

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Capteur
EPSI AX

Vcc *(rouge/red)*	V+
S+ / NUM *(blanc/white)*	S1
0V *(Noir/black)*	S2
mA+ *(bleu/blue)*	S3
GND *(blindage/shield)*	S4
	0V

Epsilog VX
Bornier 6 points
6 points connector

SCAIME

II. SOFTWARE INSTALLATION :
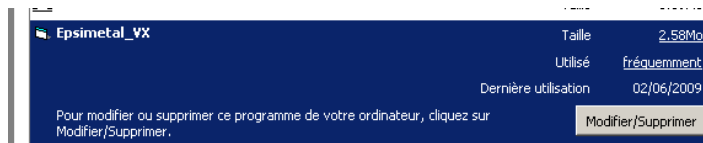
1.EPSILOG VX SOFTWARE :

Software removing

Warning : If a previous version has already been installed on the PC, you must previously uninstall it:
« start » menu >> « parameters » >> « control panel » >> « Add / Suppr programs »

Select « Epsimetal VX », and the click « modify / Suppress »

(choose « do not suppress common files »

Software set up

Insert the CDrom .
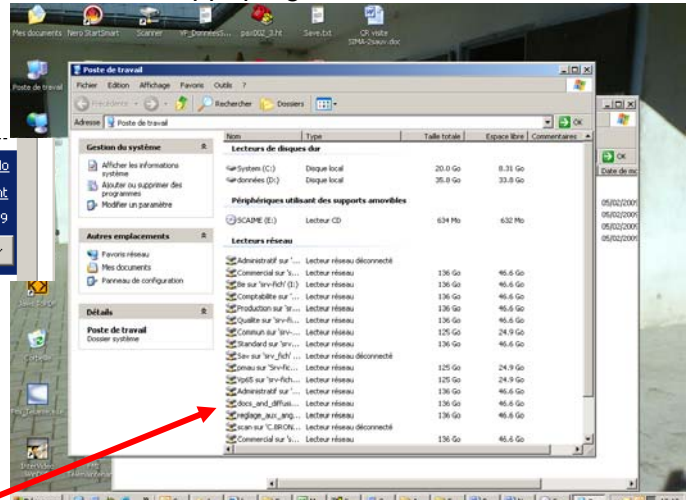Open the directory « SCAIME lecteur CD »
Open then « Epsilog_VX »
Launch « setup.exe »
And follow windows instructions

Le program will install the short key [Epsilog VX] in « start/programs »

2. USB DRIVERS :

- When connecting EPSILOG interface for the first time, the computer requires drivers for the new device.
- Insert the the CD rom to copy the drivers in your computer.
- There are two type of drivers to be installed (hardware and virtual COM port). So the dialog box should appears two times (see details in **« annex»** at the end of this datasheet)
- After virtual COM port installation, Check and note the COM port affected to the Epsilog Vx device.
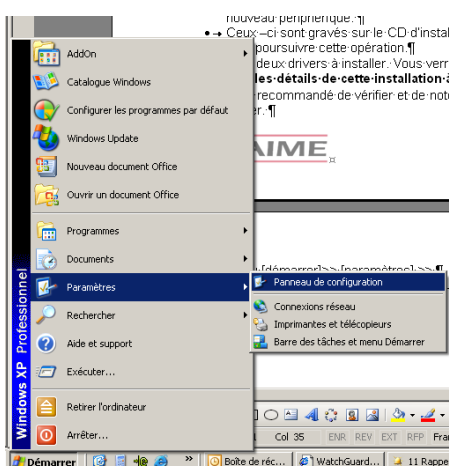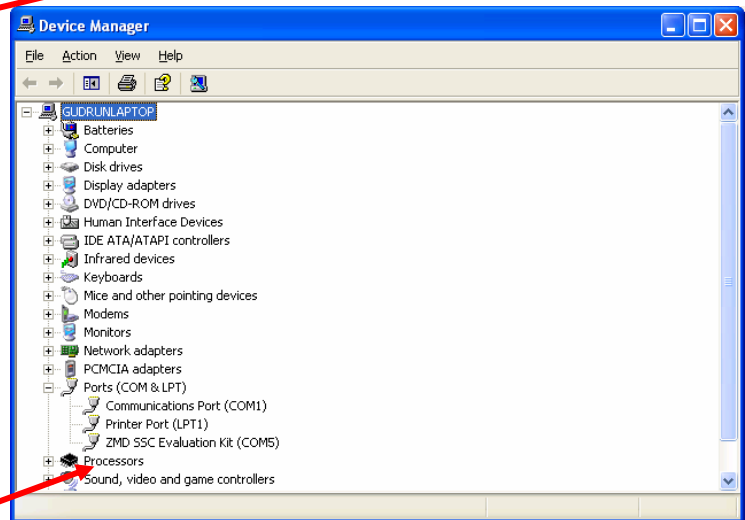

Menu [start]>> [parameters] >> [control panel] >> [system]
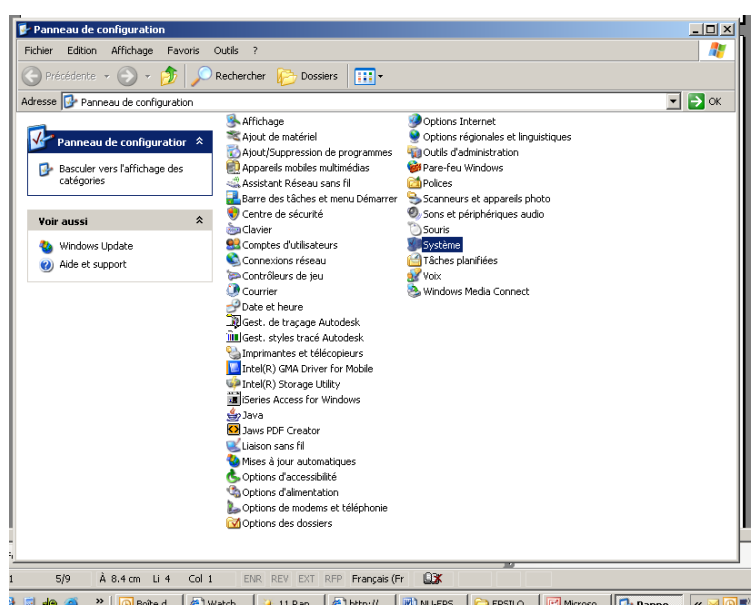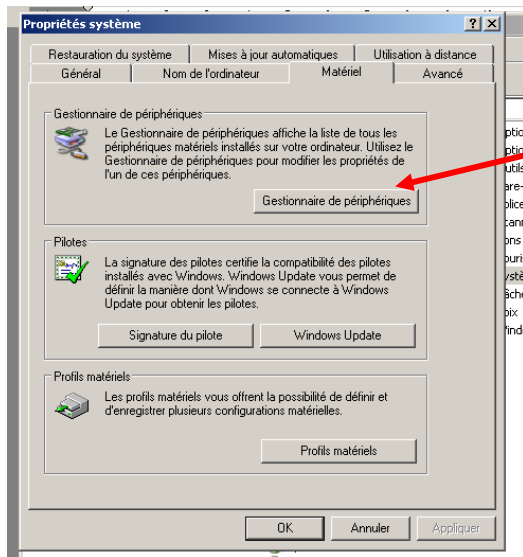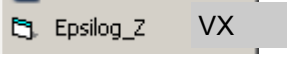
>> [material] >> [device manager]

>> [+] Ports (COM & LPT)
N° of port COM ZMD SSC evaluation kit
(here : COM 5)

UTILISATION

I.   STARTING:

1. EPSILOG VX SOFTWARE:

- Connect the sensor Epsi-AX to the Epsilog VX box (see "wiring" chapter)
- Connect Epsilog VX to a USB port
- Click the short key [🗂 Epsilog_Z   VX] in « Start>>Programs»
- A window appears with a green button « départ mesure ».
- Set the switch to the sensor to be tuned (position 1 to 4)
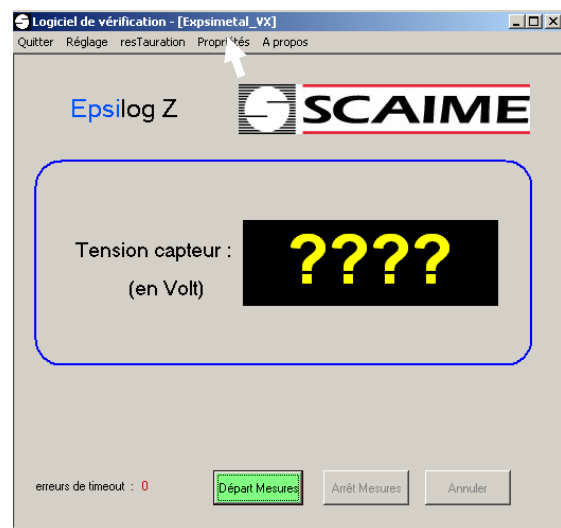
<div style="color:red; border:2px solid red;">

CAUTION :
the N° of the position to be displayed is not known by the software in the main window. Only the knob position (1 to 4) tells you which sensor is displayed

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2. PORT COM NUMBER :

if necessary, configure the COM port number:
- Click the menu "Propriété »
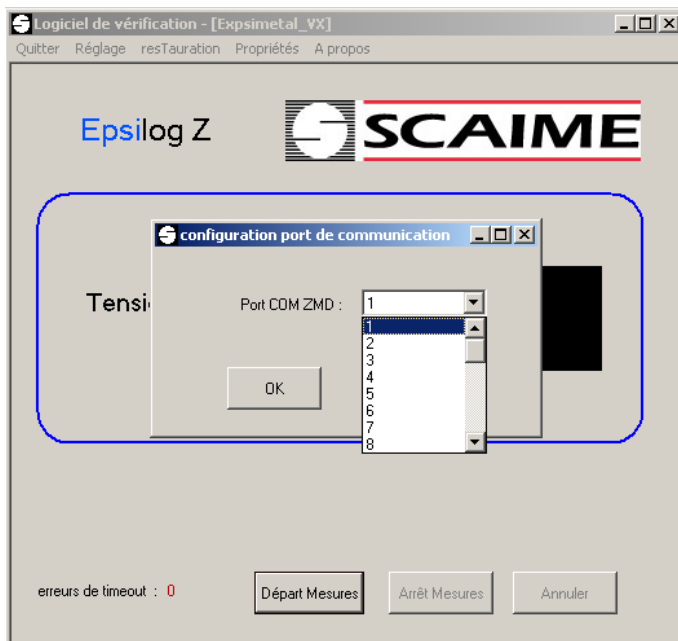
Select the N° of port COM checked previously in the « device manager » window
Click OK.
The N° of port COM is affected to Epsilog and stay the same on a given PC independently of the physical USB port.

II.   MONITORING :

Click « départ mesure » to display the voltage output of the selected sensor.
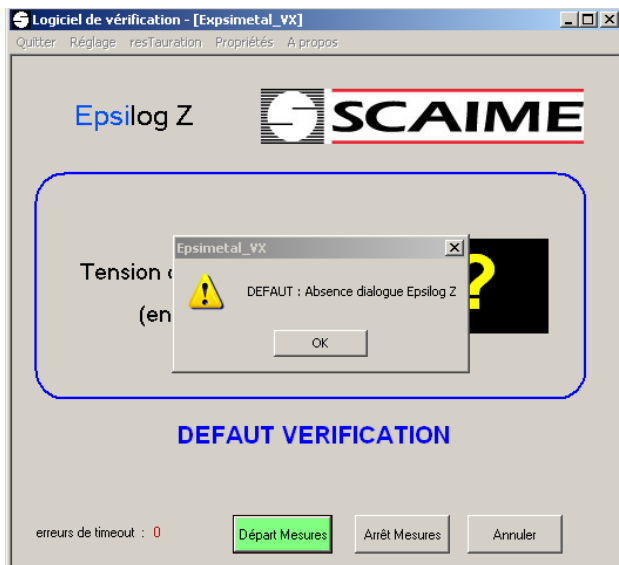

If the message « absence dialogue Epsilog VX » appears, check that the Epsilog VX box is well connected to the USB port of the PC and the USB port number.

If the message « absence dialogue capteur » appears, check the sensor wiring and the position of the switch.

NB : When the voltage output is displayed (« tension capteur », the sensor works in its analog mode and it is not possible to know which sensor is displayed . Only the position of the knob tells you which sensor is displayed : (position 1 to 4)

III.   OFFSET TUNING:

Click « stop mesures » in order to get all menus ON.
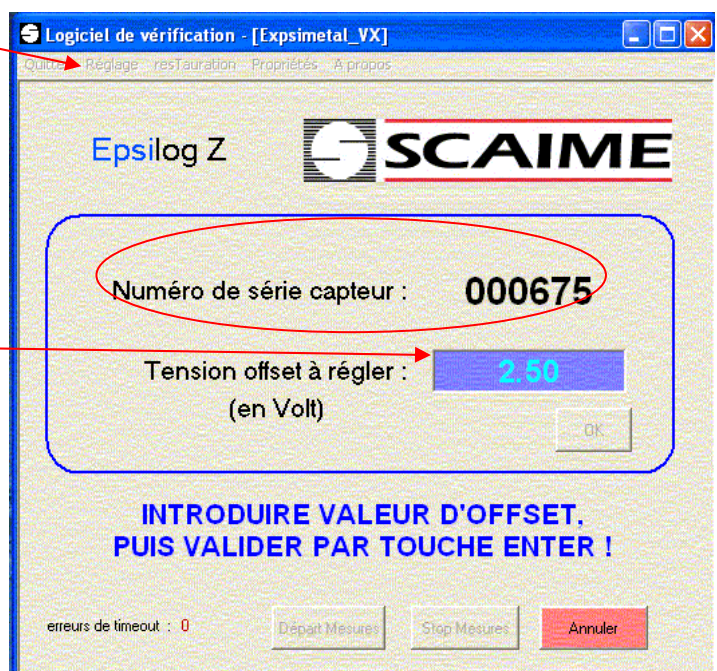
Click « réglage » then « offset ».

The window display the sensor serial number and a default value of 2.5V.

When tuning several sensors on different channel, it is advised to note the sensor serial number affected to each channel (knob position 1 to 4)

Set the required offset value (between 0.2 and 4.8V)

Then click OK or Enter (2 times). The main window appears

In this menu the sensor is in its digital mode and it is not possible to read the actual voltage output. To read the actual voltage output of the selected sensor you need to click « depart mesures» in the main window.

IV.   GAIN TUNING :

Click « stop mesures » in order to get all menus ON

Click « réglage » then « gain ».

The window display the sensor serial number and the actual digital gain of the selected sensor.

When tuning several sensors on different channel, it is advised to note the sensor serial number affected to each channel (knob position 1 to 4)

Set the desired digital gain

Then click OK or Enter (2 times). The main window appears

In this menu the sensor is in its digital mode and it is not possible to read the actual voltage output. To read the actual voltage output of the selected sensor you need to click « depart mesures» in the main window.

Gain tuning affect the offset value so it is necessary to tune the offset after a gain tuning.

V.   RESTORE :

A storage of the sensor configuration is made before any gain or offset modification.
   It is possible to restore the sensor parameters at a previous date as soon as gain or offset tuning has been done with the same PC.
Restoring parameters are displayed with date and hours

161702-B_NU-EPSILOG-VX-E-0111_006098
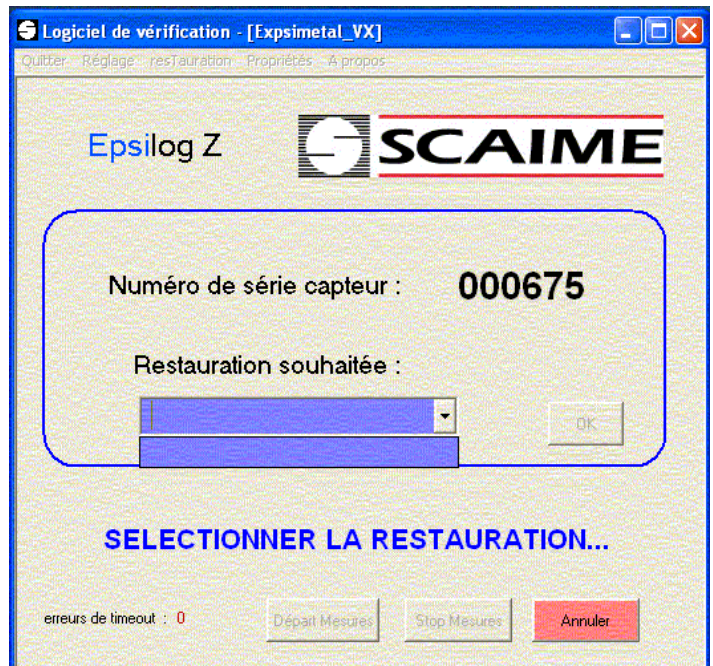
ANNEX : USB DRIVERS INSTALLATION

2 USB Driver Installation

System Requirements
- 5x86-compatible PC
- 32 MB RAM
- Hard drive with 20MB free space
- USB port
- Microsoft® W98/ME/2000/XP

The USB version of the SSC Evaluation Kit requires installation of two drivers.

These two drivers will make the PC's USB port appear as a virtual COM port (typically COM3 or COM4 on most computers). The software provided with the SSC Evaluation Kit accesses the SSC Evaluation Board as if it were a COM (RS232) port. These drivers will not affect the operation of any other USB peripherals.

Driver installation is very similar for Windows® XP or Windows 2000 installations; however, there are slight differences in the appearance of the dialog boxes. Windows® XP installation procedures are given below. Similar steps for Windows® 2000 installation are given in Appendix A in this document.

Installation for Windows® XP Pro or XP Home Operating Systems

Installing the Basic USB Driver

Important: System administrator rights are required to install the USB driver on your PC.

Use the USB cable to connect the SSC Evaluation Board to an available USB port on your PC. The "Found New Hardware" wizard launches and brings up the following dialog box. Complete the following steps.
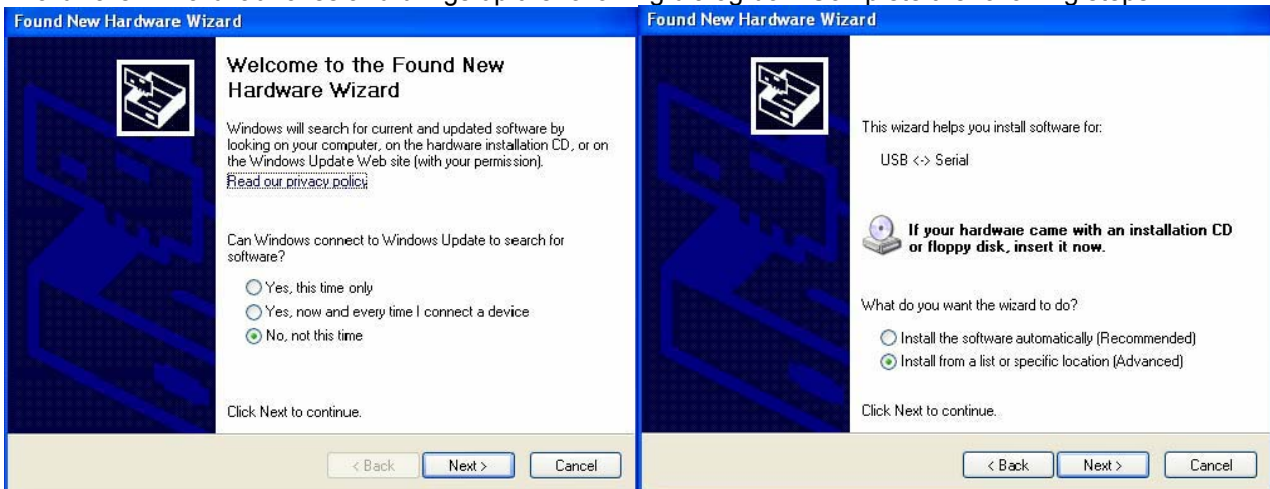
Step 1: Select "No, not this time," and click "Next."   Step 2: Select "Install from a list or specific location (Advanced)." Click "Next."

Step 3: Select "Search removable media (floppy, CD-ROM)," and click "Next."

Step 4: When the warning about failing logo testing appears, click "Continue Anyway" because this concern is not applicable.

Step 5: Finish the driver installation by clicking "Finish."

installing the Virtual Com Port USB Driver

The second required USB driver causes the USB device to appear to the system as a virtual COM port.

Follow the same steps as outlined under Installing the Basic USB Driver above to complete this second driver installation.

Checking USB Port Operation

Verify that the new hardware is operating properly before continuing.

Access the control panel by clicking Start Settings Control Panel. Double click the "System" icon. The adjacent dialog box appears.

Click on the "Hardware" tab, and then on "Device Manager." This brings up the dialog box shown below.

If the USB is operating properly, "ZMD SSC Evalua-tion Kit (COMx)" appears under "Ports (COM & LPT)." Typically, the "x" is 3 or 4. Remember this virtual COM port number. It is the COM port to select when using the software provided with the SSC Evaluation Kit.